#### TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL NASA/GODDARD SPACE FLIGHT CENTER REQUEST FOR TASK PLAN / TASK ORDER CONTRACT NO /TASK NO JOB ORDER NUMBER CONTRACTOR APPROF FY NAS5-TASK NO. AMENDMENT 0 1 99124 00 QSS Group, Inc. 451-21810-46-89 TASK TITLE: (NTE 80 characters; include Project name) FQPSK DEMONSTRATION TEST APPROVALS: (Type or print mims and sign) ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR) DATE 564 Warner Miller 6/8/00 564 301 286-8183 BRANCH HEAD DATE CODE Robert Kasa 6/8/00 564 301 286-8043 CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) DATE CODE Robert S. Lebair, Jr. Allarah a 560 301-286-6588 FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE? CONTRACTING OFFICER'S QUALITY REP. DESIGNATED FAM: IX NO [ ] YES (To be completed by Contracting Officer) The contractor shall identify and explain the reason for any deviations, exceptions, or conditional assumptions taken with respect to this Task Order or to any of the C.O. Requested Quote on: technical requirements of the Task Order Statement of Work and related specifications. JUN 16 2000 The contractor shall complete and submit the required Reps and Certs. Contractor will develop specification or statement of work under this task for a future procurement. [ | YES Flight hardware will be shipped to GSFC for testing prior to final delivery. [ ] NO Government Furnished Property/Facilities: YES -- SEE LIST OF GFP (offsite only) / FACILITIES (onsite only) [ ] NO Onsite Performance: [ ] NO YES If yes: [ ] TOTAL PARTIAL If partial, indicate onsite work in SOW by asterisk (\*) Surveillance Plan Attached: I I YES [ ] NO Highlighted Contract Clauses: (to be completed by Contracting Officer) The effective date of this task will be the date of the Contracting Officer's signature below. INCENTIVE FEE STRUCTUR (check one) (See Contract NAS5-99124, Attachment K, Incentive Fee Plan) X No. 1 No. 5 No. 2 No. 3 Cost 10% 50% 25% 25% % % 15% 25% 25% 50% Schedule Technical 50% 25% % 75% 25% (To be completed by Contracting Officer) \$45,857 The target cost of this task order is \$ The target fee of this task order is \$ 2,847 The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is \$ 48,704 The maximum fee is \$1,161 The minimum fee is \$0. AUTHORIZED SIGNATURE ING TO THE CONTRACT CLAUSE "TASK ASSIGNMENTS AND REPORTS ELIZABETH J. AUSTIN 0 10 CONTRACTING OFFICED SIGNATURE OF CONTRACTING CONTRACTOR'S ACCEPTANC AUTHORIZED SIGNATURE

# TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

# REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO TASK N	O Company Street Street	articles in the second	Carried Services (1997)
	NAS5-	TASK NO.	AMENDMENT	
QSS Group, Inc.	99124	301		

Applicable paragraphs from contract Statement of Work:

STATEMENT OF WORK: (Continue on blank paper if additional space is required)

The contractor shall model the FQPSK modulation as needed for spectral analysis during testing. The contractor shall test the GSFC-provided modulators in a closed loop configuration at the GSFC.

The data rate for the high rate modulator shall be 300 Mbps.

The data rate for the low rate modulator shall be 2 Mbps.

The contractor shall test the performance of the modulators via the End-to-End System at the WSC with a TDRS satellite.

The low rate data shall be transmitted at S-band.

The high rate data shall be transmitted at Ku-band.

The contractor shall test the performance of the modulators with the Ka-band Phased Array Antenna via End-to-End System at the RF SOC.

## PERFORMANCE SPECIFICATIONS:

Final Report shall provide end-to-end performance test results for S, Ku, and Ka bands as compared to theory (I.e., bit error rates and spectrum of the demodulated base band signal).

## APPLICABLE DOCUMENTS:

None.

TASK END DATE:

12/30/00

## MILESTONES/DELIVERABLES AND DATES:

1. Modeling/Simulation completed

8/15/00

S and Ku closed loop testing

2. Closed lop testing completed

9/15/00

3. End-to-End testing completed

10/30/00

4. Technical Progress Report

Monthly, due the 15th of the month

5. Final Report

12/30/00

6. Complete Ka testing at RF SOC

12/10/00

## PERFORMANCE STANDARDS:

Schedule:

On-time completion/delivery of the milestones/deliverables

Technical:

ATR's acceptance of the above

# FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):

Warner Miller, building 11, room E215